

ASSESSMENT OF SCOPE OF IMPLEMENTATION OF THE HUMAN RESOURCES RISK MANAGEMENT

Edyta BOMBIAK

Uniwersytet Przyrodniczo-Humanistyczny, Siedlce; edyta.bombiak@uph.edu.pl

Abstract: For years, various arguments have been made to show how important human resources management is for the development of sustainable competitive advantage, while the risks associated with HRM have rarely been acknowledged. Given the importance of the human factor in the knowledge economy, it can be argued that human resources risk is one of the most important areas of risk in today's organizations. At the same time, the area remains unexplored, both in terms of theory and practice of management. The purpose of the research was to assess the scope of practical implementation of the human resource risk management concept.

Keywords: human resource risk, personal risk, occupational risk, human resource risk management.

OCENA ZAKRESU WDROŻENIA KONCEPCJI ZARZĄDZANIA RYZYKIEM PERSONALNYM

Streszczenie: Od lat przedstawiane są różne argumenty wskazujące na to, jak ważne dla uzyskania trwałej przewagi konkurencyjnej przedsiębiorstwa jest zarządzanie zasobami ludzkimi, natomiast stosunkowo rzadko poruszane są kwestie związane z ryzykiem dotyczącym tych zasobów. Biorąc pod uwagę znaczenie czynnika ludzkiego w gospodarce opartej na wiedzy można sformułować tezę, że ryzyko personalne stanowi jeden z ważniejszych obszarów ryzyka we współczesnych organizacjach. Jest to jednocześnie płaszczyzna słabo rozpoznana zarówno na gruncie teorii, jak i praktyki zarządzania. Celem podjętych badań była ocena zakresu wdrożenia koncepcji zarządzania ryzykiem personalnym.

Słowa kluczowe: ryzyko personalne, ryzyko osobowe, ryzyko zawodowe, zarządzanie ryzykiem personalnym.

1. Introduction

Without a doubt, doing business in contemporary, turbulent environments involves risks. Needless to say, risk management is now becoming an integral part of organizational operations for many business entities. Sources of risk for businesses are not only decisions concerning tangible and intangible assets but also, at increasingly regular intervals, human resources development.

As the human factor is a driving force for company growth and has a great impact on its competitive position, issues regarding human resource management are widely covered in literature, as reflected by the large number of available sources. For years, various arguments have been made to show how important human resources management is for the development of sustainable competitive advantage (Tansky, and Cohen, 2001), while the risks associated with HRM have rarely been acknowledged (Becker, and Smidt, 2016). Unlike other risk types, such as financial or production risk, this risk type remains unexplored, both in the theory and practice of management, despite latest research demonstrating its increasing role in corporate success. The results of a 2016 study conducted by the AON consulting services provider among 1418 representatives of firms and institutions from 30 different industries and 60 countries around the world confirm it (Raport AON, 2016). And when the risk associated with the human factor is considered, it is typically treated as equivalent of fraud or occupational accidents. Such a narrow view results in the lack of manager awareness related to the nature of the risk and its impact on company operations. Therefore, the purpose of this study is to present the major areas of human factor-related risk based on the analysis and criticism of relevant source literature.

A review of human resource management literature demonstrates passing trends, such as competence, talent or generation management, which reflect up-to-date topics that dominate publications, are discussed at conferences or taught during workshops, which then disappear, only to give way to others. The study is an attempt to address the following question: is human resources risk management is an example of yet another passing trend, or is there a real demand for development of the process in practice? To solve the problem so defined, a diagnostic survey with the use a questionnaire was conducted. In the course of empirical research, the following detailed questions were addressed:

- Do managers have knowledge regarding human resources risk?
- Do they see the need to manage the risk?
- Do the study entities attempt to manage human resources risk?

The article is held in the context striving to account for the nature of the human factor-related risk and the specificity of its management.

2. Human factor as a source of risk

The human factor-related risk lies within the area of operational risk defined as a loss resulting from non-conformity or failure of internal processes, people and technical systems or external events (Resolution, 2013). Employee-related risk, as one of the many internal factors, is inherent in the operations of every business entity. Nevertheless, both its scope and consequences may vary. Typically, it is associated with adverse staffing events which impede the attainment of one's objectives and have negative undertones. However, some assume that it is a measure of deviation of final results from intended results, where the deviation might be either positive (plus) or negative (minus) (Jorion, 2003). Such an approach to the understanding of risk associated with humans highlights specific opportunities possibly stemming from the right personnel decisions. The risk in question consists of (Figure 1):

- the risk resulting from the specificity of personal risk,
- the risk associated with the process of HR management (human resources risk),
- the risk resulting from the specificity of work (occupational risk).

The personal risk involves involuntary mistakes of workers which may cause damage to the property of employers or third parties. It means the uncertainty regarding the delivery of benefits expected after employment of a given employee (Czajkowska, 10.09.2018). It should be directly associated with the quality of labor resources equated with employee competitive potential, which is composed of knowledge, skills, talents, motivation, personal features, attitudes, values, and physical and mental condition (Sajkiewicz, 2002). It is made manifest through the mistakes of employees lacking professional knowledge and skills regarding the tasks performed and motivation to complete them. A special source of human resource risk may be talents indicating aptitudes for gaining knowledge or acquiring certain competences which reflect employee's potential for development (opportunity to gain new and improve existing competences). Another threat or opportunity could be the attitudes of the labor force, which determine one's behavior in the workplace and his/her readiness to respond in a certain way. Other important features are personality characteristics of employees, which make them more prone to specific behaviors and emotions.

The second component – termed the human resources risk – signifies engagement, under the conditions of uncertainty, in personnel-related activities (Lipka, 2002). It is defined as a function of the probability that a negative event occurs as a consequence of personnel-related decisions and the scale of the negative consequences of that event for normal company operations (Rutka, and Czerska, 2006). This risk concerns the efficiency of individual processes as part of the personal function and it includes the following (Lipka, 2002; Gołębowski, 2015):

- employment planning risk,
- selection risk,
- motivation risk,
- evaluation risk,
- development risk,
- dismissal risk.

A selection of factors of the human resources risk in certain areas of human resource management are presented in Table 1.

Table 1.
Selected human resources risk factors

Area of risk	Adverse personnel event
Employment planning	<ul style="list-style-type: none"> - no specifications regarding employee demand - no specifications regarding employee gap - no specifications regarding positions and no competence profiles
Employee selection	<ul style="list-style-type: none"> - limiting recruitment only to internal (or external) sources - no selection criteria - improper selection strategy - limiting selection to the simplest selection techniques - no adaptation process
Employee motivation	<ul style="list-style-type: none"> - no defined aims of the motivation process - no formalized criteria and methods of task performance - incompatibility of the motivation system and employee needs - no individualized approach to employees - low attractiveness of motivation tools (e.g. low wages) - overestimation of the material (or non-material) dimension - incoherence between different motivation stimuli - inflexibility of the motivation system - unfair treatment of employees on the part of their superiors - more negative than positive reinforcement - ineffective communication - conflicts and "unhealthy" competition
Evaluation	<ul style="list-style-type: none"> - no precise objectives of final evaluation - no formalized system of evaluation (arbitrariness) - unsuitable methods and techniques of evaluation - inadequate evaluation criteria - lack of knowledge (among employees) regarding the criteria - insufficient qualifications of the evaluators - inadequate frequency of evaluation - no feedback regarding evaluation results for employees - evaluation results not translating into personnel-related decisions - non-uniformity of the system of evaluation
Development	<ul style="list-style-type: none"> - no training needs analysis - wrong recipients of training activities - unsuitable methods and techniques of training - inappropriate conditions of training - incompetent training professionals - no evaluation of the effects of training - no career paths - no formalized promotion criteria - inconsistencies between the development policy and the personnel strategy - no promotion opportunities (horizontal, vertical)

Cont. table 1

Dismissal	<ul style="list-style-type: none"> - lack of alternatives to the dismissal process (such as redeployment) - faulty diagnosis of the personnel situation - lack of defined aims of the dismissal - no formalized criteria of dismissal - no information regarding the dismissal criteria provided to employees - no dismissal schedule - lack of assistance for dismissed employees - loss of key employees
-----------	--

Note: compiled on the basis of (Wróblewski, 2016).

Risk planning is associated with irregularities at the time of specifying the quantitative and qualitative demand for employees. The generators of the selection risk are errors made during recruitment, selection and adaptation, which result in hiring a wrong person. The motivation risk relates to the effectiveness of the system of building a strong employee commitment to meet the needs of both the organization and its employees. The development risk is associated with the policy of investing in human resource competence development. On the one hand, actions taken to develop human capital area great opportunity for all companies. On the other hand, they bring about potential risks of destabilizing the management process (Stemplewska, 2015). The evaluation risk is determined by the choice of evaluation criteria and the methods and the organization of the assessment process. The dismissal risk (or de-recruitment risk), in turn, is the effect of the profit and loss account concerning the allocation of human resources. It emerges whenever an entrepreneur is forced to take a decision to reduce employment (external dismissal) or to perform internal employee shifts (internal dismissal) (Bombiak, 2017a).

The above indicates that human resources risk is related to every stage of the human resources process and that it is a drawn risk (Wróblewski, 2009), as due to the high degree of interdependence between different stages of the personnel functions, risk appearing in one area brings about changes regarding the level of risks associated with other stages of the human resources process.

The third component, the occupational risk, is defined as a probability of occurrence of work-related adverse events causing losses, and in particular adverse health effects, in employees, as a consequence of occupational hazards in the working environment or of the way of working (Regulation, 1997). Among its factors are (Anonim, 09.09.2018):

- mechanical factors – threat of getting injured by the mobile parts of machines and equipment, as well as a result of slipping, tripping, or falling,
- thermal factors – increased temperature during equipment handling, hot surfaces (equipment),
- chemical factors – exposing employees to multi-component chemical substances,
- biological factors – exposing employees to pathogenic agents (bacteria, viruses, fungi, parasites),
- physical factors – exposing employees to noise, vibrations, radiation,
- psychosocial factors (physical burden and occupational stress).

Under the provisions of the Labor Code (KP), every employer shall evaluate and record occupational risk at every job position, inform every employer of the relevant level of risk, and indicate the necessary individual and collective protection measures to reduce such risk to the so-called acceptable risk level. The Regulation of the Minister of Labor and Social Policy regarding industrial health and safety also obliges employers to apply all and any necessary preventive measures to mitigate the risk. It imposes an obligation on them to ensure such workplaces and work organization that protect employees against accidents and factors which are detrimental to one's health or burdensome (Romanowska-Słomka, and Słomka, 2008).

Figure 1 represents an innovative model of risk associated with the human factor, which takes into account relations between individual components.

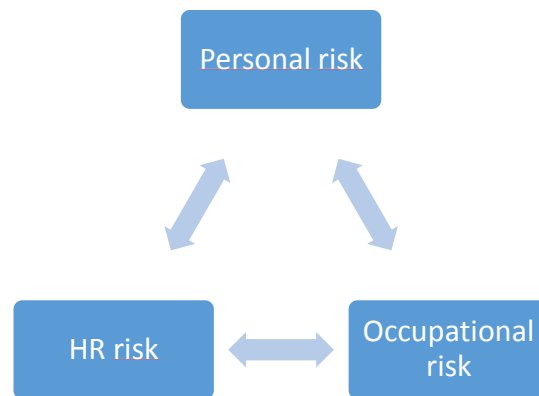


Figure 1. Human factor-related risk model.

It should be noted that individual risk components are strongly interrelated and may strengthen or weaken one another, thus ensuring either a positive or a negative synergy effect. The relationship between personal and personnel (human resources) risk results from the fact that proper procedures of employment planning, professional selection, effective investment in employee development, or an efficient system of incentives contribute to an increase in human capital quality, while at the same time reduce the personal risk.

The personal risk influences the human resources risk, especially with regards to the management staff responsible for the implementation of individual steps of the staffing process, as these processes' effectiveness depends on managers' expertise. In addition, personal and occupational risks are also related. Employees equipped with prerequisite knowledge and skills perform professional activities in a reflective and logical manner, which limits the various types of the occupational risk. On the other hand, occupational hazards may exert reciprocal influence on the quality of work potential, increasing or decreasing the personal risk.

A similar correlation may be observed between the human resources risk and the occupational risk. This relation can be either direct or indirect. Favorable conditions of work directly facilitate optimal personnel-related decision taking, which can simultaneously affect the possibility of materializing the human resources risk. Yet another element leading to employee engagement is the working environment. Here, we can see its direct effect on the risk of motivation, development and dismissal (de-recruitment).

All in all, considering the specificity of the risk associated with the human factor and the mutual relations between its components, we may formulate a conclusion that this risk type cannot be eliminated. However, it may be recognized and managed, which would reduce potential losses and maximize prospective benefits. In so far as legal regulations impose on the employer an obligation to manage occupational risk, there is no such obligation with regards to the personnel and human resources risk. The lack of mandatory management results in employers frequently ignoring the aspects of risk related to the human factor.

3. Essence of human resources risk management

The human resources risk is an inherent part of operations of any entity in which the social sub-system constitutes a fundamental and imperative factor. Therefore, the human resources risk should be managed, just as any other risk type, such as financial, insurance, banking or investment risks, etc.

In the opinion of the author, human resources risk management may be defined as a set of actions undertaken with the use of specific methods and aiming at human resources risk optimization by reacting to hazards and opportunities in such way that the optimum objectives are met. The goal of human resources risk management is to acquire information regarding the hazards or opportunities resulting from the human factor, to determine their effect on company operations, and to establish operational procedures. By analogy, the following stages of the process may be distinguished (Kaczmarek, 2008):

1. Identification of the types of the human resources risk within an organization – this stage aims at addressing the following questions:
 - What are the causes of human resources risk, if any?
 - Which areas of human resources management are particularly exposed to risk?
 - What are its consequences?
2. Risk evaluation and measurement – to establish the significance of the identified human resources risk from the point of view of its effect on company operations. We can speak of risk management whenever the risk can be quantified (Tarczyński, and Mojsiewicz, 2001). Even though human resources risk may not be precisely measurable, one may try to estimate it in order to manage it. One useful method in the process of risk recognition and assessment might be the risk probability and consequence matrix (Kapuścińska, Lachiewicz, and Matejun, 2014; Czerska, and Rutka, 2016; Bombiak, 2017b).
3. Selection and implementation of a human resources risk strategy.
What is important at this stage is to undertake actions aiming at risk reduction to acceptable levels, whenever they are a threat, and at increasing the probability of

occurrence of events which may have a positive effect on company's objectives. A vital action here would be to establish priorities, choose tools and apply their optimum combination.

4. Monitoring and evaluation of the effectiveness of undertaken activities, i.e. impact check and assessment.

There are two basic approaches to human resources risk management that we may adopt (Dziawgo, 1998):

- an active approach, which involves an exertion of influence on the causes of risk and actions which may reduce losses related thereto or take advantage of new opportunities;
- a passive approach, focusing on preventing potential losses.

The active approach features total exclusion of the likelihood of loss by non-engagement in high risk actions (avoiding risk) or reducing said likelihood (reduction, risk mitigation (Kaczmarek, 1999). This entails, among other things, abandoning investment in human capital, as a high risk element, or limiting the scale of development activities. Such a strategy may, however, generate an increase in some other category of risk. Despite the fact that limiting actions related to human capital development does not prevent the possibility of achieving company's objectives, there is a high chance of intensification of, for instance, the motivation or dismissal risk due to strong interrelations between various types of the human resources risk. One may also attempt to relocate the human resources risk so that it is moved to other entities. In the case of the risk of development, such transfer would take the form of employee participation in the financing of his/her trainings. Thereby, employers would increase employee motivation to broaden knowledge and extend skills, while mitigating the risk. Another form of transferring risk on others is to insure it. It is associated with the transfer of responsibility for the coverage of potential losses on the insuring establishment. Nevertheless, it is viable only in certain cases of the human resources risk. One example of such strategy are compensations for the losses caused by employee accidents at work. Reduction of risk may be achieved also by means of diversification. In case of limiting the human capital risk, e.g. in the sphere of production, it is effected through the implementation of modern, fully automated and efficient equipment. So, human potential use might be improved or even replaced to some extent with machines, which limits human resources risk. Replacing human labor with machines is, however, capital intensive. Furthermore, some of the latest devices require specialists to operate them, which in turn may intensify the human resources risk (Stemplewska, 2015).

The passive approach to human capital risk control is, conversely, expressed by an analysis of hazards and an evaluation of their consequences for the company, if any, without taking any preventive measures. Its main focus is on the monitoring and control of risk factors, without an active use of the chances resulting therefrom. One of the passive strategies is to create financial reserves, which will allow coverage of any potential losses caused by the human resources risk.

In conclusion, human resources risk management does not involve its avoidance at all cost, as this is simply unattainable. Instead, it consists in risk factor identification, risk level measurement, and decision taking regarding the appropriate measures to deal with the risk by the application of a proper strategy suited to the risk nature, i.e., reducing it in the case of negative consequences or increasing the chances of those personnel events which may have a positive effect on company operations.

4. Human resources risk management in practice

Studies regarding the implementation of the concept of human resources risk management in practice were completed in the 2nd quarter of 2017 and involved 180 medium-sized and large enterprises located across the Mazowieckie Province. The research tool was a survey questionnaire. The study entities were diversified in terms of:

- size: (medium 81% , large 19%),
- types of ownership (private 77%, state 23%),
- dominant type of business activity (production 50%, services 42%, trade 8%).

The target audience of the questionnaire was the management staff. In the study structure, junior level managers constituted 51%, middle level – 35%, and senior level – 14%.

In the course of research, an attempt was made to verify the thesis which held that even though risk management is important for the practice of management, its practical implementation is fragmentary.

Figure 2 presents managers' opinions regarding their knowledge about risk management, the need to manage the risk and practical implementation of the process.

As can be seen, the majority of the study managers had knowledge about the human resources risk (83.3%) and was convinced that it needed to be managed (87.5%). This seems to confirm the assumed importance of the issue for the practice of organizational management. A largely smaller percentage (only 62.5%) of respondents confirmed the fact that this risk was managed in their organizations. In this context, a question arises about the cause of these discrepancies. Why do managers, irrespective of the feeling that human resources risk needs to be managed, do not always take actions in the area? Perhaps, one of the reasons can be a lack of established procedures to deal with this specific risk type, or an absence of risk management culture in an organization (Domańska- Szaruga, 2016).

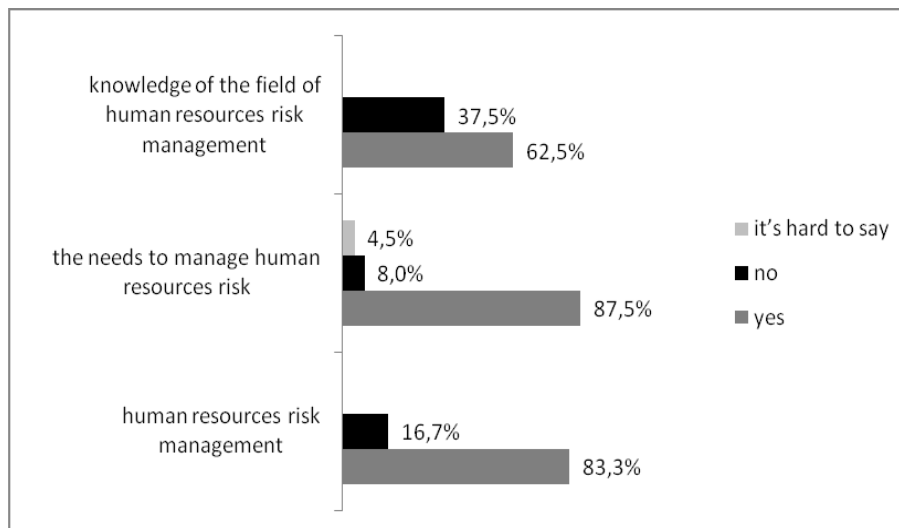


Figure 2. Human resources risk management in the context of related manager needs and competences (N = 180).

Further analyses reveal that an action which was most often taken in association with human resources risk was covering related losses – such practices were declared by three percent of the study participants. On the other hand, every fourth manager said that their organizations monitored human resources risk and undertook spontaneous response actions using available resources. Twenty percent of the surveyed pointed that there were no activities taken with respect to human resources risk.

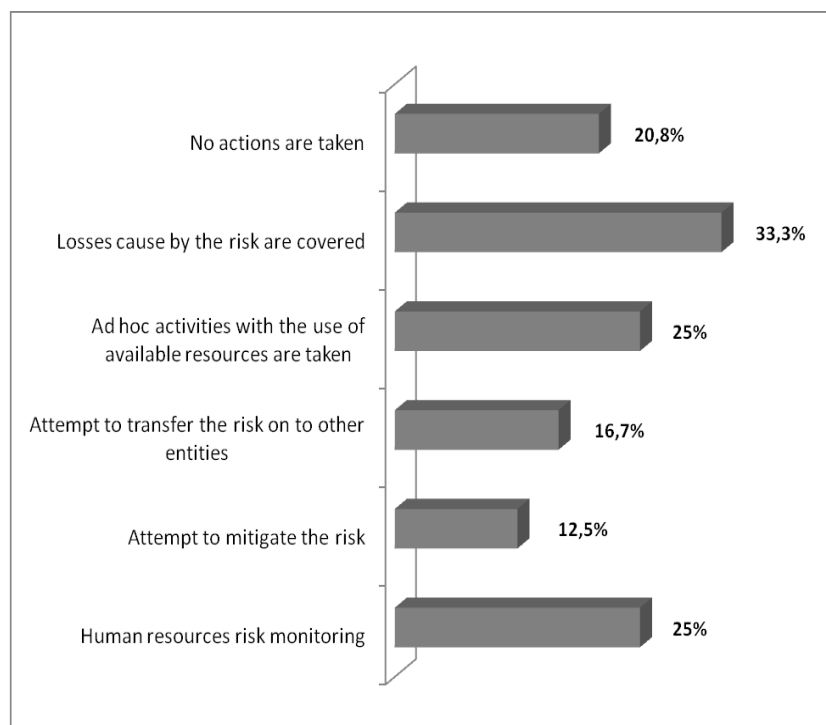


Figure 3. Actions taken in response to human resources risk (N = 180).

The analysis of reported results leads to a conclusion that not all organizations present an active attitude to the human resources risk. There are some that appear to underestimate the risk. Organizations trying to manage the risk, however, most frequently show a passive

approach which involves monitoring and covering losses, if any. Such an attitude is typical of the diffuse form of risk management and concentrates on the compensation of its negative consequences (Buła, 2015). Research demonstrates that human resources risk management consists in hazard elimination, deviation monitoring, and loss minimization. A small percentage of the respondents confirmed that more proactive activities were taken, which involved the transfer of human resources risk onto other entities (e.g. by insuring against its consequences) or an attempt to reduce it by outsourcing recruitment, training etc. A quite frequent practice included ad hoc actions taken whenever the risk occurred, which indicate a reactive approach. This suggests that the process of human resources risk management within these entities has not been formalized. In view of the conducted studies, we may see a clear lack of activity in the field of measuring and reporting.

Therefore, the results presented above seem to confirm the thesis regarding the fragmented nature of the process of human resources risk management. The main reason behind it should be sought in the deficit of knowledge regarding the methods of human resources risk evaluation. In subject literature, there is no coherent, consistent concepts about the methods of risk measurement and the standards of risk reporting, which constitute a vital factor discouraging the practicing. Another difficulty is the fact that it is very often hard to evaluate the level of risk and its probability due to interrelations between its individual components and the dynamics of the internal and external environment of the organization.

5. Summary

The human resources risk is one of the ingredients of risk associated with the human factor within organizations. Its strong association with staff and occupational risks makes it an indispensable element of organizational management. Hence, human resources risk management becomes a necessity, as evidenced by above research regarding the opinions of the management staffs. Nevertheless, in practice, there is a large gap between the need of human resources risk management and the practice in the field. Despite the fact that managers appear to be aware of the role of human resources risk management in achieving organizational success, the study confirms the fragmented approach to the process in practice, which is largely limited to reacting to risk whenever it appears. In the process of human resources risk management the mere awareness of the management staff is insufficient. What is vital is to take proactive actions that will allow one to reduce losses generated by the risk or take advantage of emerging opportunities.

In the contemporary, turbulent environment, it is impossible to meet objectives without effective risk management. Thus, human resources risk management is, without a doubt, a considerable challenge for modern enterprises, especially when one considers the fact that the

human resources risk is somehow entrenched in the social subsystem of any organization. Human resources risk management facilitates staff hazard location, early implementation of preventive actions, and developing control mechanisms in order to reduce its negative consequences. What is key here is the ability to anticipate the risk, translate it into opportunities, and acquire optimum benefits for the organization. That is why, it is necessary to develop effective methods, tools and procedures, which will allow for the creation of a set of complex and systemic solutions supporting managerial processes oriented at creating a value added. A principal weakness of the human resources risk management practices so far might be the passive attitude of the managers, as expressed by their focus on covering losses caused by the risk.

Bibliography

1. Analiza zagrożeń oraz ocena ryzyka zawodowego (2018.09.09). Available online https://www.ciop.pl/CIOPPortalWAR/appmanager/ciop/pl?_nfpb=true&_pageLabel=P14800170401346749845063&html_tresc_root_id=1903&html_tresc_id=1904&html_klucz=1887&html_klucz_spis=1903.
2. Becker, K., and Smidt, M. (2016). A risk perspective on human resource management: A review and directions for future research. *Human Resource Management Review*, 26(2), 149-165.
3. Bombiak, E. (2017). Evaluation of personnel risk as an element of strategic human resource management. In M. Jabłoński (Ed.), *Strategic Performance Management: New Concepts and Contemporary Trends* (pp. 253-269). New York: Nova Science Publishers Inc.
4. Bombiak, E. (2017). Human resources risk as an aspect of human resources management in turbulent environment. In F. Pinzaru, A. Zbucnea, C. Bratianu, E. Vatamanescu and A. Mitan, *Strategica. Shift. Major Challenges of Today's Economy* (pp. 121-132). Bucharest: Tritonic Publishing House.
5. Buła, P. (2015). *System zarządzania ryzykiem w przedsiębiorstwie jako element nadzoru korporacyjnego (The system of corporate risk management as an element of corporate supervision)*. Kraków: Uniwersytet Jagielloński.
6. Czajkowska, A. (2018.09.10). Jakie ryzyko ponosi pracodawca zatrudniając pracowników? Retrived from https://kadry.infor.pl/popzednie_tematy_dnia/535912,2, Jakie-ryzyko-ponosi-pracodawca-zatrudniajac-pracownikow.html.
7. Czerska, M., and Rutka, R. (2016). Metody oceny ryzyka personalnego w organizacji. *Studia Ekonomiczne*, 280, 21-33.
8. Domańska-Szaruga, B. (2016). Kultura zarządzania ryzykiem (Risk management culture). In E. Skrzypek, A. Piasecka, and A. Kowalska (Eds.), *Uwarunkowania jakości usług*

- w społeczeństwie informacyjnym (*Service quality preconditions in information societies*) (pp. 111-120). Lublin: UMCS.
9. Dziawgo, D. (1998). *Credit-rating. Ryzyko i obligacje na międzynarodowym rynku finansowym (Risk and bonds on the international financial factor)*. Warszawa: PWN.
 10. Gołębski, M. (2015). Parametryzacja funkcji personalnej jako narzędzie zarządzania ryzykiem kadrowym (Parametrization of the human resources risk function as a tool of staff risk management). *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia*, 74, 523-532.
 11. Jorion, P. (2003). *Financial Risk Manager Handbook*, New Jersey: John Wiley & Sons, Hoboken.
 12. Kaczmarek, T. (1999). *Zarządzanie ryzykiem handlowym i finansowym dla praktyki (Trade and financial risk management for practical purposes)*. Gdańsk: ODDK.
 13. Kaczmarek, T. (2008). *Ryzyko i zarządzanie ryzykiem (Risk and risk management)*. Warszawa: Difin.
 14. Kapuścińska, K.Z., Lachiewicz, S., and Matejun, M. (2014). Metoda pomiaru ryzyka kadrowego w organizacjach publicznych (Method of staff risk measurement in public organizations). *Acta Universitatis Lodzensis Folia Oeconomica*, 4(304), 105-115.
 15. Lipka, A. (2002). *Ryzyko personalne. Szanse i zagrożenia zarządzania zasobami ludzkimi (Human resources risk. Threats and opportunities of human resources management)*. Warszawa: Poltex.
 16. Resolution No. 8/2013 of the Financial Supervision Authority (KNF) dated 8 January, 2013 regarding the issuance of the Recommendation concerning operational risk management in banks.
 17. Romanowska-Słomka, I., and Słomka, A. (2009). *Zarządzanie ryzykiem zawodowym (Occupational risk management)*. Kraków-Tarnobrzeg: Tarbonus.
 18. Rozporządzenie Ministra Pracy i Polityki Socjalnej z 26 września 1997 r. w sprawie ogólnych przepisów bezpieczeństwa i higieny pracy (DzU Nr 169/2003 , poz. 1650) (Regulation of the Minister of Labour and Social Policy dates 26 September 1997 on the general provisions regarding industrial health and safety (J. of Laws No. 169/2003, Item 1650).
 19. Rutka, R., and Czerska, M. (2006). Ryzyko ewaluacyjne w zarządzaniu personelem w badanych urzędach miasta (Evaluation risk in personnel management in the study Town Halls). In A. Stabryła (Ed.), *Doskonalenie systemów zarządzania w społeczeństwie informacyjnym (Management system enhancement within information societies)* (pp. 201-216). Kraków: Wydawnictwo Akademii Ekonomicznej.
 20. Sajkiewicz, A. (2002). *Jakość zasobów pracy. Kultura, kompetencje, konkurencyjność (Work resources quality. Culture, competences, competitiveness)*. Warszawa: Poltext.

21. Stemplewska, L. (2015). Zarządzanie ryzykiem w obszarze rozwoju kapitału ludzkiego (Risk management in the area of human capital development). *Kwartalnik Naukowy Uczelni Vistula*, 1(43), 42-53.
22. Tansky, J.W., and Cohen, D.J. (2001). The relationship Between Organizational Support, Employee Development, and Organizational Commitment: An Empirical Study. *Human Resources Development Quarterly*, 12(3), 285-300.
23. Tarczyński, W., and Mojsiewicz, M. (2001). *Zarządzanie ryzykiem. Podstawowe zagadnienia. (Risk management. Basic issues)* Warszawa: PWE.
24. Wróblewski, J. (2009). Metodyka pomiaru ryzyka personalnego (Methodology of HR risk assessment). In A. Lipka, S. Waszczak (Eds.), *Koszty jakości zarządzania kapitałem ludzkim a ryzyko personalne (Costs of human capital management vs HR risk)* (pp. 93-104). Katowice: Wydawnictwo Akademii Ekonomicznej.
25. Wróblewski, J. (2016). *Ryzyko personalne w zarządzaniu zasobami ludzkimi służb marketingowych przedsiębiorstw farmaceutycznych. (Human resources risk in the management of human resources of pharmaceutical companies marketing departments)*. Unpublished doctoral thesis. Gdańsk: Uniwersytet Gdański, Wydział Zarządzania.
26. Zarządzanie ryzykiem i ubezpieczeniami w Polsce, Raport AON Polska (2016). AON Risk Services. Retrieved from <http://www.aon.com/poland/risk/Aon%20Thought%20Leadership/Zarządzanie-ryzykiem-i-ubezpieczeniami-w-Polsce-IV-edycja.jsp>.